IESE Business School
University of Navarra

Retire at your own risk

Target-date funds (TDFs) have become popular retirement investments, with a promise of reallocating assets to lower risk exposure closer to retirement age. But they underperform.

August 1, 2014

When do you plan to retire? 2030? Ok, "Fund 2030" for you.

Because target-date funds (TDFs) are low hassle and appear to reduce risk closer to retirement age, they are popular destinations for retirement savings. TDFs have even

©IESE Business School

become the default option for many employer-sponsored plans.

Also known as life-cycle funds, TDFs typically begin their life cycles by investing heavily in equities. They then move assets over to bonds as retirement approaches.

The theory is that investors are able to take their biggest risks when they are young and have many working years ahead of them. As retirement approaches, the funds look to reduce volatility and help protect investors' nest eggs from downside risk.

But while it seems sensible, investors tend to come up short with this strategy. After all, these funds are most aggressive when the portfolio is smallest and most conservative when the portfolio is largest.

Javier Estrada, professor of finance at IESE, is not the first to question TDFs' strategy. But he is the first to test how TDFs fare vis-à-vis 10 contrarian and alternative strategies in 19 countries, using data spanning 110 years. The short answer is that all 10 alternative strategies tend to leave investors wealthier in retirement than TDFs. Yes, there is uncertainty with TDFs, Estrada explains, but the uncertainty is "about how much higher, not how much lower, investors' terminal wealth is expected to be with contrarian strategies," he writes.

The glidepath illusion

Estrada's article for the *Journal of Portfolio Management* is titled "The Glidepath Illusion: An International Perspective." A glidepath is defined as the relationship between a fund's asset allocation and the investor's age or the number of years to retirement. A central feature of the TDFs' glidepath is the decreasing stock allocations and increasing bond allocations as retirement approaches.

The appeal of the glidepath approach for many investors is that they prefer downside protection to upside potential as they approach their last days of paid work. TDFs are hailed as an easy way to manage assets and risk.

But how you define risk is at issue here. Are risk and volatility the same thing? Or is ending up with less money a more important risk to consider in retirement?

Tracking 40 years of retirement savings

Digging into the data, Estrada first compares traditional TDF strategies to "contrarian" strategies that mirror them, comparing terminal wealth, volatility and more.

©IESE Business School

Specifically, he compares the performances of five hypothetical TDFs that start heavily invested in stocks and then move to bonds over 40 years. The TDFs are labeled 100-0, 90-10, 80-20, 70-30 and 60-40, signifying that the funds start 100 percent in stocks and end 0 percent in stocks, and so on. The contrarian funds are labeled 0-100, 10-90, 20-80, 30-70 and 40-60 and they start heavily invested in bonds and then move into stocks — as much as 100 percent into stocks — over the same 40-year period.

The five TDF and five contrarian strategies are evaluated and compared over 71 overlapping 40-year periods, from 1900 through 2009, using data from stocks and government bonds. Returns for 19 countries and two regions are adjusted for inflation. The 40-year periods consist of 40 annual contributions to these funds, with annual asset reallocations, as appropriate.

Across the board in Estrada's sample, the contrarian strategies outperformed the TDFs. Furthermore, the performance of the lower performing contrarian strategies still came out ahead of TDFs.

In addition to the contrarian strategies, Estrada looks at three "equity-driven" strategies which focus on stocks throughout the 40-year life cycle. The first is fully invested in stocks for 40 years. The next two are fully invested in stocks for 30 and 20 years, respectively, and then they shift out of stocks and into bonds until they hit a 50-50 stock-bond allocation one year before retirement.

He also looks at two "balanced" fund strategies which maintain a constant allocation to stocks (either 50 or 60 percent in stocks) over all 40 years, with rebalancing at the end of every year.

The results were broadly similar for contrarian, equity-driven and balanced strategies. All generated larger pots of wealth than traditional TDFs.

In some cases alternative strategies dramatically outperformed traditional TDFs.

A volatile brew

Even in times of economic uncertainty, the alternative strategies in this research are generating greater returns than the TDFs, Estrada notes.

Yet because of their higher volatility, the alternative strategies were more likely to surprise investors at the end of an investor's working life. That said, Estrada notes that potential drops

©IESE Business School

in value are likely to be more than offset by larger gains across funds' full life cycle.

"In other words, the better investment results accumulated over a working lifetime more than offset potential bad luck toward the end of the road," Estrada writes.

He says that while alternative strategies may increase investors' uncertainty about expected wealth come retirement, this is uncertainty about how much upside they will reap.

Risk and reward

"This controversy ultimately comes down to how risk is defined," Estrada states. "A conservative strategy may deliver a smooth ride and few surprises but is likely to underperform an aggressive strategy in terms of the capital accumulated at retirement."

And while he believes it is not an academic's job to tell investors how to assess risk, he believes investors should be made aware that there are many ways to do it.

As Charlie Munger, Warren Buffett's partner at Berkshire Hathaway, said: "If you're investing for 40 years in some pension fund, what difference does it make if the path from start to finish is a little more bumpy... so long as it's all going to work out well in the end?"

www.iese.edu/insight

©IESE Business School